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### ABSTRACT

This study examined differences in final course grades for campus-based and distance education students in the School of Business and Entrepreneurship at Nova Southeastern University (Florida). Data on 4,161 course grades for winter term 1997 were obtained from university records. It was found that students enrolled in courses offered through distance education received a significantly greater frequency of successful grades (A, B, C, or Pass) than their campus-based counterparts. For the core course offered to master of business administration students, off-campus students were in parity with on-campus students in terms of the relative frequency of successful grades. However, for the core course offered to doctor of business administration students, off-campus students received a greater frequency of successful grades than their on-campus counterparts. An appendix provides four sets of data tables. (MDM)

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# AN ANALYSIS OF FINAL GRADES FOR SELECTED COURSES IN THE SCHOOL OF BUSINESS AND ENTREPRENEURSHIP: DIFFERENCES BETWEEN ON-CAMPUS STUDENTS AND OFF-CAMPUS STUDENTS

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Report 98-14

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December 1998

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### **EXECUTIVE SUMMARY**

The Office of Research and Planning provided the first comprehensive analysis of grades at Nova Southeastern University in 1996. Because of the way data were organized, it was not possible at that time to report grades based on place of class instruction (on-campus and off-campus).

Since then, Research and Planning has conducted analyses of grades by faculty affiliation status (full-time faculty and part-time faculty) and by place of class instruction (on-campus courses and off-campus courses). These analyses focused on courses taught during Winter Term 1997, with breakouts provided for each academic center.

The purpose of this report is to build on these studies and to report on grades by place of class instruction for selected courses in the School of Business and Entrepreneurship, which offers the Master of Business Administration (MBA) program and Doctor of Business Administration (DBA) program to both on-campus students and off-campus students:

Master of Business Administration

GMP 5080 Applying Managerial Finance

Doctor of Business Administration

CSA 6030 Information and Decision Science

Administrative staff in the School of Business and Entrepreneurship selected these courses for analysis since they are broadly-representative core courses that were offered to both on-campus students and off-campus students during Winter Term 1997. Specifically, GMP 5080 is required for ongoing MBA students and CSA 6030 is required for nine of ten doctoral majors offered by the School.

Following guidelines established by the Southern Association of Colleges and Schools:

- All courses offered in either Broward County or Miami-Dade County were considered on-campus courses.
- All courses offered at other locations were considered off-campus courses.

This level of analysis should further support the University's many efforts to assess the comparability of campus-based courses to courses offered at distance education sites.

For the core course offered to MBA students (GMP 5080), off-campus students were in parity with on-campus students in terms of the relative frequency of successful grades



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received. However, for the core course offered to DBA students (CSA 6030), off-campus students received, at a significant level ( $p \le .05$ ), a greater frequency of successful grades than their on-campus counterparts. There were no instances where on-campus students received at a significant level ( $p \le .05$ ) a greater frequency of successful grades than off-campus students.

Using the frequency of successful grades as a unit of measure, this study provides a degree of evidence that off-campus students can enjoy academic success that meets and may possibly exceed the level of academic success experienced by on-campus students. To gain a better sense of academic achievement between on-campus students and off-campus students, this study offered the recommendation that the School of Business and Entrepreneurship should provide some type of common assessment (possibly a common final examination) in selected courses that are offered in both formats. Then, it would be possible to empirically determine achievement of on-campus students and off-campus students on an equivalent examination or other common assessment instrument.



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### **BACKGROUND**

The Office of Research and Planning provided the first comprehensive analysis of grades at Nova Southeastern University in 1996 (Grades at Nova Southeastern University: Fall Term 1993, Fall Term 1994, and Fall Term 1995; 1996). A limitation of that report was that grades could only be reported by academic center and not by place of class instruction (oncampus and off-campus). Since then, Research and Planning has reported on grades by faculty affiliation status (A Comparison of Final Grades Awarded by Full-Time Faculty and Part-Time Faculty by Academic Center for Winter Term 1997; 1998) and by place of class attendance (A Comparison of Final Grades Awarded in Campus-Based Courses and Courses Offered Through Distance Education for Winter Term 1997; 1998).

The purpose of this report is to build on these studies and to report on grades by place of class instruction for selected courses in the School of Business and Entrepreneurship, which offers the Master of Business Administration (MBA) program and Doctor of Business Administration (DBA) program to both on-campus students and off-campus students:

Master of Business Administration

GMP 5080 Applying Managerial Finance

Doctor of Business Administration

CSA 6030 Information and Decision Science

Administrative staff in the School of Business and Entrepreneurship selected these courses for analysis since they are broadly-representative core courses that were offered to both oncampus students and off-campus students during Winter Term 1997. Specifically, GMP 5080 is required for ongoing MBA students and CSA 6030 is required for nine of ten doctoral majors offered by the School.

Guidelines established by the Southern Association of Colleges and Schools were used to provide an operational definition of on-campus instruction and off-campus instruction:

- All courses offered in either Broward County or Miami-Dade County were considered on-campus courses.
  - During Winter Term 1997, 54.3 percent of all grades in the School of Business and Entrepreneurship were awarded in on-campus classes.
- All courses offered at other locations were considered off-campus courses.



During Winter Term 1997, 45.7 percent of all grades in the School of Business and Entrepreneurship were awarded in off-campus classes.

### METHODOLOGY

The methodology used for *Grades at Nova Southeastern University: Fall Term 1993, Fall Term 1994, and Fall Term 1995* (1996) was quite useful and the methodology for this report largely replicates the procedures used in that prior study:

- 1. The computing center provided the original extract file on November 11, 1997.
  - This date provided an approximate four month interim from the end of Winter Term 1997 and the creation of the extract file, allowing sufficient time for adjustment to most *Incomplete* grades and the posting of any late grades.
- 2. The extract file was purposely prepared so that the five column cluster code for each course was identified, allowing for later discrimination between on-campus courses and off-campus courses.
- 3. Administrative staff in the School of Business and Entrepreneurship selected one broadly representative core course from the MBA program and one broadly representative core course from the DBA program. Each program offers courses to both on-campus students and off-campus students.
- 4. Grades were organized into two separate categories:
  - Successful grades (A, B, C, and Pass)
  - All other grades

The chi-square test was then used to determine if there were differences in the frequency of successful grades awarded to on-campus students and off-campus students.

### RESULTS

Table 1 provides a degree of University-wide context to the frequency of successful grades and all other grades for on-campus students and off-campus students during Winter Term 1997. Table 2 focuses exclusively on the School of Business and Entrepreneurship and the frequency of successful grades and all other grades for on-campus students and off-campus students during Winter Term 1997. For the entire School, students enrolled in courses



offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.

Tables 3.A and Table 3.B relate to the two courses selected for this study. For the core course offered to MBA students (GMP 5080), off-campus students were in parity with on-campus students in terms of the relative frequency of successful grades received (Table 3.A). However, for the core course offered to DBA students (CSA 6030), off-campus students received, at a significant level ( $p \le .05$ ), a greater frequency of successful grades than their on-campus counterparts (Table 3.B). There were no instances where on-campus students received at a significant level ( $p \le .05$ ) a greater frequency of successful grades than off-campus students.

### SUMMARY

The University is compelled by the Southern Association of Colleges and Schools to demonstrate that "[] its distance learning programs are effective and comply with all applicable *Criteria*" (*Criteria* for Accreditation; 1998, p. 40). The Southern Association of Colleges and Schools has further compelled the University to "Provide documentation that all distance learning courses are comparable to the on-campus courses and that the goals for each off-campus site are clear and explicit and are assessed regularly" (personal communication from J. T. Rogers, July 2, 1998).

This report, in parity with findings identified in A Comparison of Final Grades Awarded in Campus-Based Courses and Courses Offered Through Distance Education for Winter Term 1997 (1998), provides a degree of evidence that off-campus students enjoy academic success that certainly meets the level of academic success experienced by on-campus students. Using the frequency of successful grades as a unit of measure, the findings of this report provide ample evidence that "distance learning courses are comparable to the on-campus courses."

To gain a better sense of academic achievement between on-campus students and off-campus students, it is recommended that the School of Business and Entrepreneurship should provide some type of standardized assessment (possibly a common final examination) in selected courses that are offered in both formats. Then, it would be possible to empirically determine achievement of on-campus students and off-campus students on an equivalent examination or other common assessment instrument.



### REFERENCES

- A Comparison of Final Grades Awarded by Full-Time Faculty and Part-Time Faculty by Academic Center for Winter Term 1997. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-09.
- A Comparison of Final Grades Awarded in Campus-Based Courses and Courses Offered Through Distance Education for Winter Term 1997. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 96-10.
- Grades at Nova Southeastern University: Fall Term 1993, Fall Term 1994, and Fall Term 1995. (1996). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 96-19.
- Criteria for Accreditation. (1998). Decatur, Georgia: Southern Association of Colleges and Schools Commission on Colleges.



**APPENDIX:** 

Tables 1 to 4



Table 1

:

Summary of Successful Grades (A, B, C, Pass) and All Other Grades by Place of Class Location and by Academic Center: Winter Term 1997

	Successful Grades: A, B, C, Pass	ccessful Grades: A, B, C, Pass	All Other Grades	: Grades		
Academic Center	Campus	Distance	Campus	Distance	þ	p Results of Chi-Square Analysis
Farquhar Center for Undergraduate Studies	6,687	3,348	1,390	505	.001	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.
Fischler Graduate School of Education and Human Services	4,906	2,421	605	164	.001	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.
School of Business and Entrepreneurship	1,973	1,807	288	93	.001	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.

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There is no difference in the frequency of successful grades awarded between students enrolled in courses offered through distance education and .007 students who are campus-based.	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based .001 counterparts.
46	808
06	2,373
499	8,075
1,609	15,175
Center for Psychological Studies	All Four Academic Centers with Both Campus-Based Courses and Distance Education Courses



:

Summary of Winter Term 1997 Grades by Place of Class Location: School of Business and Entrepreneurship

				Succ	Successful Grades	Frad	es			,			
	A		В		C		Pass	s l	Subtotal	'	All Other Grades	her es	Total
Faculty Status	Z	%	Z	%	Z	%	Z	%	Z	%	Z	%	Z
Campus-Based Instruction			<u> </u>		:								
Broward County	908	41	524	27	72	4	276	14	1,678	98	270	14	1,948
Miami-Dade County	136	43	78	25	9	7	75	24	295	94	18	9	313
Subtotal	942	42	605	27	78	3	351	16	1,973	87	288	13	2,261
Distance Education													
Subtotal	1,018	54	959	35	39	7	94	S	1,807	95	93	5	1,900
TOTAL	1,960	47	47 1,258	30	117	C.	445	11	3,780	91	381	66	4,161

There is no statistically significant difference between campus-based courses and distance education courses .001). regarding the frequency of successful grades and all other grades awarded (p < Null Hypothesis:

Chi-square = 76.35 and the Null Hypothesis is rejected (p = .001). Students enrolled in courses offered through the use of distance education received a statistically significantly greater frequency of successful grades than their campus-based counterparts.

Finding:

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Summary of Winter Term 1997 Grades by Place of Class Location: GMP 5080 (Applying Managerial Finance)

				Succ	Successful Grades	Grade	ş			ı			
	A		В		၁	j	Pass	ا ا ي	Subtotal	la la	All Other Grades	her es	Total
Faculty Status	Z	%	Z	%	Z	%	Z	%	Z	%	Z	%	z
Campus-Based Instruction													
Broward County	36	46	21	28	10	14	0	0	<i>L</i> 9	91	7	6	74
Miami-Dade County	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	36	49	21	28	10	14	0	0	29	91	7	6	74
Distance Education													
Subtotal	61	47	53	40	10	∞	0	0	124	95	7	2	131
TOTAL	97	47	74	36	50	10	0	0	191	93	14	7	205

There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded ( $p \le .05$ ). Null Hypothesis:

Chi-square = 1.26 and the Null Hypothesis is accepted (p = .262).

Finding:

Summary of Winter Term 1997 Grades by Place of Class Location: CSA 6030 (Information and Decision Science)

Table 3.B

	į		:	Suc	Successful Grades	Grad	sa		i	ı			
	A		В		C	ļ	Pass	s	Subtotal	[a]	All Other Grades	ner es	Total
Faculty Status	Z	%	z	%	Z	%	Z	%	Z	%	z	%	z
Campus-Based Instruction													
Broward County	7	27	10	38	0	0	0	0	17	9	6	35	26
Miami-Dade County	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	7	27	10	38	0	0	0	0	17	65	6	35	26
Distance Education													
Subtotal	12	29	5	28	0	0	0	0	17	94	1	9	18
TOTAL	19	43	15	34	0	0	0	0	34	77	10	23	4

There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded (p < Null Hypothesis:

Chi-square = 5.11 and the Null Hypothesis is rejected (p = .024). Distance education students received a statistically significantly greater frequency of successful grades than campus-based students.

Finding:

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Table 4

Comparison of Successful Grades During Winter Term 1997 for Two Courses Offered On-Campus and Off-Campus

Course	Chi-square	р	Signi	ficant difference at $p \le .05$
GMP 5080	1.26	.262	No	Off-Campus = On-Campus
CSA 6030	5.11	.024	Yes	Off-Campus > On-Campus





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